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Federal Communications Commission

Washington, D.C. 20554

In the Matter of)

Revision of the Commission's Rules to Ensure)
Compatibility with Enhanced 911 Emergency)
Calling Systems)

CC Docket No. 94-102

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To: Chief, Wireless Telecommunications Bureau

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF PRIMECO PERSONAL COMMUNICATIONS, L.P.

PrimeCo Personal Communications, L.P. ("PrimeCo"),¹ hereby responds to the Wireless Telecommunications Bureau's ("Bureau") Public Notice of June 1, 1999, seeking additional comment on various issues relating to CMRS carriers' enhanced 911 ("E-911") Phase II Automatic Location Identification ("ALI") obligations.² PrimeCo generally does not object to the Commission adopting benchmarks for encouraging and measuring deployment of ALI-capable handsets, provided that a carrier's good faith compliance with such benchmarks is sufficient for purposes of compliance with the rules. PrimeCo also reiterates that handset turnover will minimize the impact of handset-based solutions on the availability of ALI service

¹ PrimeCo is the broadband A/B Block PCS licensee or is the general partner/ majority owner in the licensee in a number of MTAs.

² See Public Notice, *Wireless Telecommunications Bureau Requests Targeted Comment on Wireless E911 Phase II Automatic Location Identification Requirements*, CC Docket No. 94-102, DA 99-1049 (rel. June 1, 1999), 64 Fed. Reg. 31530 (June 11, 1999) ("Public Notice").

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for a carrier's subscribers and roamers. Finally, PrimeCo does not object to use of CEP methodology to measure ALI accuracy.

BACKGROUND/INTRODUCTION

PrimeCo timely filed a petition for a limited waiver of the Commission's E-911 Phase II deadline on February 4, 1999. In that filing, PrimeCo requested that the Commission waive the October 1, 2001 deadline to allow carriers to implement a handset-based solution for Phase II compliance if (1) such solution exceeds current requirements for ALI accuracy, and (2) compliant handsets are offered to subscribers in advance of the October 1, 2001 deadline.³ Since that time, PrimeCo has participated in the SnapTrack CDMA Test Group, continued to meet with vendors of various solutions and monitored the standards development process closely. PrimeCo continues to evaluate various solutions, but PrimeCo has not yet committed to a particular ALI technology -- whether handset-based, network-based, or a hybrid solution. The reason for this is simple: no solution for CDMA carriers is commercially available today, and the technical and economic feasibility of possible solutions remains unresolved.

The Bureau now seeks additional comment on a number of issues involving (1) certain standards for implementation of handset-based solutions proposed by SnapTrack and APCO, (2) handset turnover and ALI availability for roamers, and (3) methodologies for determining ALI accuracy.⁴ As discussed herein, PrimeCo does not object to the adoption of deployment/penetration benchmarks as indicators of a carrier's compliance and as targets for a

³ PrimeCo Personal Communications, L.P., Dallas MTA, L.P., Houston MTA, L.P. and San Antonio MTA, L.P., Petition for Waiver of Section 20.18(e) of the Commission's Rules, CC Docket No. 94-102, filed Feb. 4, 1999, at 2 ("PrimeCo Petition").

⁴ See Public Notice at 2.

carrier's good faith efforts to deploy ALI-capable handsets. A carrier's inability to meet a particular benchmark, however, should not be deemed a *per se* violation of the Commission's rules or result in revocation of a waiver (much less a license) — so long as the carrier has made a good faith and concerted effort to comply with the rules.⁵ Industry and internal projections for handset turnover and equipment purchases all indicate that, if the Commission acts expeditiously to release an *Order* in this proceeding and if handset-based solutions prove viable and are commercially available, ALI-capable handsets will be widely available and deployed in the marketplace with minimal impact on subscribers and roamers.

DISCUSSION

I. STANDARDS FOR HANDSET-BASED SOLUTIONS

PrimeCo generally does not oppose the use of deployment or penetration benchmarks for purposes of Phase II compliance. Given that a number of factors relevant to the feasibility of benchmarks are beyond a carrier's control, such as availability of handsets from vendors and fluctuations in consumer demand for new handsets, a carrier's good faith efforts should be sufficient for purposes of compliance with the Commission's Phase II requirements. Indications are that ALI-capable handsets will be rapidly deployed in short order, if they become available and the solution is determined to be viable. However, at the outset, PrimeCo cautions that establishing benchmarks to encourage deployment of ALI-capable handsets will not suffice if the Commission does not act expeditiously to release an *Order* in this proceeding.

⁵ See APCO Further Comments at 3.

A. Initial Deployment Benchmarks

Both SnapTrack and APCO propose that carriers opting for a handset-based solution begin to deploy ALI-capable handsets by January 1, 2001. SnapTrack also proposes that carriers be required to deploy only ALI-capable handsets after December 31, 2001, while APCO proposes that at least 80 percent of handsets deployed be ALI-capable as of December 31, 2001 and 100 percent ALI-capable by December 31, 2002.⁶

PrimeCo agrees that these benchmarks can be useful for purposes of encouraging the prompt deployment of ALI-capable handsets. Such benchmarks must, however, make allowances for market demand fluctuations and vendor availability. In this regard, PrimeCo has made some preliminary estimates regarding projected handset penetration rates that assume (1) a projected handset lifecycle of approximately three years and, (2) a conservative estimate (to account for stranded inventory) that 50 percent of all new handsets it sells will be ALI-capable by year-end 2001. Based on these assumptions, PrimeCo is concerned that the SnapTrack targets of 80 percent deployment by year-end 2001 and 100 percent by year-end 2002 may not be feasible. PrimeCo believes, however, (again, subject to vendor availability and timely release of an *Order* in this proceeding) that the 100 percent target for new handset deployment can be met by year-end 2003.

Importantly, and as discussed in more detail below, PrimeCo believes that meeting APCO's initial deployment standards is not necessary to meet APCO's proposed penetration levels. Moreover, and in any event, a waiver standard or rule that incorporates benchmarks for initial deployment of ALI-capable handsets must not be deemed a rigid deadline. Rather, PrimeCo submits that a carrier's good faith efforts to meet a particular benchmark should

⁶ APCO Further Comments at 2-3; SnapTrack Comments at 4.

be sufficient for compliance purposes. Again, any benchmark date(s) should also be tied to the expeditious release of a Commission *Order* waiving or amending the rules.⁷

B. Penetration Level Benchmarks

As with initial deployment benchmarks, external factors such as vendor availability and fluctuations in market demand for handsets may affect a carrier's ability to meet particular deployment benchmarks. Thus, penetration level benchmarks should be deemed an *indicator* of a carrier's compliance, rather than a mandatory rule and, again, good faith efforts to meet penetration level benchmarks should be sufficient for purposes of compliance with the Commission's Phase II requirements.⁸ Based upon PrimeCo's preliminary estimates and assuming that the Commission promptly releases an *Order* in this proceeding, PrimeCo believes that APCO's proposed penetration level benchmarks may be within feasible ranges — with one important exception. No new technologies are accepted at a 99 percent rate, and therefore, PrimeCo would support a 90 percent year-end 2005 benchmark figure for the embedded base. Importantly, this benchmark appears achievable *without regard* to whether a carrier meets a particular initial deployment benchmark.

C. Accuracy Prerequisites

The Commission seeks comment on alternative accuracy standards for handset-based solutions.⁹ SnapTrack recommends that carriers using handset-based solutions be able to achieve accuracy of 90 meters using circular error probability ("CEP") methodology, which

⁷ See APCO Further Comments at 2 n.2.

⁸ PrimeCo presumes that APCO's penetration level benchmarks are based on a percentage of a carrier's subscribers, excluding roamers.

⁹ 47 C.F.R. § 20.18(e).

would exceed the Commission's existing requirement of 125 meters or less using a Root Mean Square (RMS) methodology. APCO recommends more generally that carriers should commit to "a specific average accuracy level substantially better than the current Phase II requirement . . . based on its best estimate of technological capabilities."¹⁰

As noted above, PrimeCo's initial waiver request was conditioned on the availability of handset-based solutions that exceed current requirements for ALI accuracy.¹¹ PrimeCo remains committed to this objective and, based recent testing results, believes that accuracy of 90 meters using CEP methodology may in fact be feasible for handset solutions. PrimeCo cautions, however, that additional testing by the industry and vendors continues, and additional testing is particularly needed for certain environments. Therefore, adoption of a specific accuracy requirement would be premature at this time. Still, PrimeCo remains confident that such solutions, if ultimately proven viable, will exceed the accuracy standard currently specified in the Commission rules.

II. ROAMING PROBLEMS AND HANDSET TURNOVER

As the Commission is no doubt aware, carriers and handset vendors themselves already compete vigorously by marketing handsets with new features. As discussed above, moreover, external and internal projections — as well as historic data — indicate that there will be rapid handset turnover and, therefore, rapid deployment of ALI-capable handsets in the marketplace, if the solution proves viable. These projections further indicate that ALI-capable

¹⁰ APCO Further Comments at 3.

¹¹ PrimeCo Petition at 2.

handsets will be rapidly available without the need for mandatory and possibly expensive handset retrofitting (which may not even be technologically feasible) or handset replacement.

PrimeCo also believes that the impact on roaming customers will be minimized. Through the standards process, and due to the attractiveness of ALI as a service option, PrimeCo believes that, for CDMA carriers, GPS-based technologies will be widely (if not uniformly) available from handset vendors and for customers.¹² As discussed above, moreover, handset turnover and the expected wide availability of ALI-capable handsets will facilitate the availability of ALI services for roamers. (In addition, some customers may simply not desire ALI capability.) Finally, Phase I location information will be available to roamers in any event.

III. METHODOLOGIES FOR DETERMINING ALI ACCURACY

The Commission also seeks additional comment on arguments regarding RMS and CEP accuracy standards.¹³ For reasons already addressed by other parties in this proceeding, PrimeCo does not object to using CEP rather than RMS for purposes of determining Phase II compliance.¹⁴

¹² The Commission seeks comment in particular on a proposal discussed by Sprint PCS. See Public Notice at 6. While this solution would address the Commission's roaming concerns somewhat, based on a network underlay, at this point PrimeCo does not believe that it is cost effective and does not believe that it should be mandated on carriers. By that same token, however, PrimeCo has no objection to waivers or rule changes that afford carriers the *option* of utilizing this solution so that vendors may continue to develop and test this solution.

¹³ Public Notice at 6-7.

¹⁴ See AirTouch Communications, Inc., Petition for Waiver, CC Docket No. 94-102, filed Feb. 4, 1999, at 8 n.22 (citing Ericsson *Ex Parte* Presentation, March 20, 1998, at 4-10).

CONCLUSION

For the foregoing reasons and those discussed in PrimeCo's earlier filings, the Commission should waive or amend its rules to allow carriers the option of complying with the E-911 Phase II rules by implementing handset-based or hybrid solutions.

Respectfully submitted,

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